

SHEET NO. 2 OF 23

LOCATION MAP

DESIGNED BY
K. WICKWARD 9)2014

DRAWN BY
NJM 4)22114

CHECKED BY
NJM 5)2014

KOOTENAI NATIONAL FOREST

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
KOOTENAI NATIONAL FOREST





GENERAL NOTES

- SECTION 201 TOPS, LIMBS, AND STUMPS SHALL BE OUTSIDE OF CLEARING LIMITS.
- SECTION 204 / 303 UNSUITABLE OR OVERSIZED MATERIAL ENCOUNTERED DURING CONSTRUCTION OR RECONSTRUCTION SHALL BE PLACED ALONG THE TOE OF THE FILL, AMY FROM DRAINAGE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

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ALL AGGREGATE AND PIT RUN, AND MATERIAL IS GOVERNMENT FURNISHED. THE PRIMARY LOCATION FOR THESE MATERIALS WILL BE THE CRIPPLE HORSE PIT (RD. 4925) — SECTION 1, 131N, R29W.

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- SECTION 625 ALL DISTURBED AREAS OUTSIDE OF THE ROADWAY TO BE SEEDED AND FERTILIZED.
- SCHEDULE OF WORK SHALL BE PROVIDED BY THE CONTRACTOR IN WRITING AT THE PRE-WORK MEETING. ANY CHANGES TO THE SCHEDULE OF WORK SHALL BE PRESENTED IN WRITING TO THE CO. ALL CULVERTS SHALL BE INSTALLED BETWEEN THE DATES OF MAY 1 TO OCTOBER 1 UNLESS APPROVED BY THE CO.
- CONTRACTOR SHALL WORK MONDAY THROUGH FRIDAY, NO WORK SHALL BE CONDUCTED WEEKENDS OR FEDERAL HOLIDAYS, PRIOR APPROVAL MUST BE RECEIVED FROM THE CO PRIOR TO WORKING OUTSIDE THESE RESTRAINTS.
- CONTRACTOR SHALL SUBMIT A DEWATERING PLAN AND AN EROSION CONTROL PLAN TO THE CO IN WRITING PRIOR TO THE START OF WORK. THE COST OF BOTH DEWATERING AND EROSION CONTROL ARE INCIDENTAL TO ITEM 60253 IN THIS CONTRACT.
- CONTRACTOR IS REQUIRED TO PROVIDE TRAFFIC CONTROL INCLUDING CLOSURE DEVICES AND SIGNS. TRAFFIC CONTROL IS INCIDENTAL TO OTHER ITEMS IN THIS CONTRACT. A PLAN MUST BE PROVIDED TO THE CO PRIOR TO THE START OF WORK.
- CULVERTS ON LIVE STREAMS SHALL BE INSTALLED DURING LOW FLOW IF POSSIBLE.

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REVISION

GTR DUNN TIMBER SALE

62556	60752	60710	60270	60270	60253	32232	32222	30357	25101	25101	23050	20481	20480	20427	20419	20419	20404	20401	20151	Number	Item	
Seeding and Fertilizing, Dry Method	Clean inlet/Outlet	Jack Crushed CMP inlet in Place	24" Corrugated Steel Pipe, 0.064" Thickness, (Includes culvert excavation), Compaction Method B	18" Corrugated Steel Pipe, 0.064" Thickness, (includes culvert excavation), Compaction Method B	52" x 37" Corrugated Steel Pipe Arch, 0.079" Thickness, (Includes culvert bedding Preparation and Dewatering), Compaction Method B	Place Aggregate Grading D, Compaction Method B, GFP	Pit Run, Maximum Size: 2", Compaction Method B, GFP, Purchaser to Screen	Road Reconditioning, Compaction Method B	Placed Riprap, Class 3, Commercial source	Placed Riprap, Class 1, Commercial source	Roadside Brushing	Drainage Excavation, Drainage Dip, Compaction Method E	Drainage Excavation, Surface Water Deflector, Compaction Method F	Roadway Excavation, Berm Removal , Compaction Method F	Drainage Excavation, Type Outlet Ditch	Drainage Excavation, Type Roadside Ditch		Roadway Excavation, Compaction Method E, Finishing Method D	Clearing and Grubbing Disposal Method E	Mahilipation	Item Description	SU
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SHEET NO. 4 OF 23 SHEET TITLE SUMMARY OF QUANTITIES & NOTES

DESIGNED BY
K. WICKWARD BJ2014

DRAWN BY
NJM 4J22/14

CHECKED BY
NJM 5J2014

GTR DUNN TIMBER SALE

U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE

FILE No.

KOOYENAI NATIONAL FOREST





CULVERT LENGTH (FEET) ROLLING DRAIN DIP BLIND DRAIN (LIN. FT.)	ROLLING DRAIN (LIN. FT.) BLIND DRAIN (LIN. FT.) SURFACE DEFLECTOR (LIN. FT.) TYPE'	ROLLING DRAIN DIP BLIND DRAIN (LIN. FT.) SURFACE DEFLECTOR (LIN. FT.) TYPE:	ROLLING DRAIN OF THE PROPERTY	ROLLING DRAIN DIP BLIND DRAIN (LIN. FT.) SURFACE DEFLECTOR (LIN. FT.) TYPE* WSTALLATION RIPRAP OLICE DITCH (LF) GASKETS REQUIRED 1 1 1 3 1 1 1 CLASS INLET (CY) OLICE OUTLET OUTLET OLICH OLI	DRAIN DIP TO THE TO THE TOTAL COLORS TO THE TO	ROLLING DRAIN DRAIN (LIN. FT.) BUILT CLASS CLASS INLET (CY) O. O
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SHEET NO. 5 OF 23 SHEET TITLE DRAINAGE LISTING (1 OF 3) DESIGNED BY K. WICKWARD 9/2014 DRAWN BY NJM 4/22/14

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KOOTENAI NATIONAL FOREST





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SHEET TITLE DRAINAGE LISTING (2 OF 3)





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		DRAINAGE EXCAVATION, 4% OUTSLOPE																EXISTING 18" CMP, CLEAN OUTLET	EXISTING 18" CMP, JACK INLET			Corrugations shall Be 2-23 x 1/2 unites conterwise stated below Pipe Thickness Shall Be As Shown on The 'Summary of Quantities' Sheet "See 'CULVERT CONSTRUCTION DETAILS' Sheet "As Staked	REMARKS	

SHEET NO. 7 OF 23 SHEET TITLE DRAINAGE LISTING (3 OF 3) DESIGNED BY K. WICKWARD 9/2014 DRAWN BY NJM 4/22/14

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VII) 4.40	MP 3.21 MP 3.22 MP 3.37 MP 3.66 MP 3.81 MP 4.48	MP 1.69 MP 1.75 MP 2.50 MP 2.81 MP 2.84 MP 3.04 MP 3.20	MP 0.56 MP 0.79 MP 1.36	STATION OR MILEPOST MP 0.00
20350 30357 30650	20481 20481 20481 20481 20481	20481 30801 20481 60270 20481 20481 20481	23050 30357 30650 62556 20481 20481	Cri PAYITEM NUMBER
Lunicum NF 3K 40 D, nomer Knuge Road, Night End Roadside Brushing End Road Reconditioning End Dust Abatement Project Continues on NFSR 4613, Hornet Ridge Road	Drainage Excavation, Type Dip Private Road Right Drainage Excavation, Type Dip Unction NFSR 4613. Homet Ridge Road, Right	Drainage Excavation, Type Dip Place 20 CY GFM Aggregate, Compaction Method 2 Drainage Excavation, Type Dip Install 18" x 30' CMP, Compaction Method B Drainage Excavation, Type Dip Drainage Excavation, Type Dip Drainage Excavation, Type Dip Drainage Excavation, Type Dip	Begin Road Reconditioning, Compaction Method A Begin Road Reconditioning, Compaction Method A Begin Dust Abatement Seed and Fertilize all Disturbed Areas, Dry Method Drainage Excavation, Type 4% Outslope, Compaction Method E Drainage Excavation, Type Dip, Compaction Method E Drainage Excavation, Type Drivable Ditch Left, Compaction Method E	Cripple Horse Fisher River NFSR 334 DESCRIPTION OF WORK Junction with Highway 37 ***Buried High Voltage*** DESCRIPTION OF WORK MILE POST NUMBER MP 0.000 MP 0.000 DESCRIPTION OF WORK MMP 0.000 DESCRIPTION OF WORK
		MP 1.27 MP 1.35 MP 1.38 MP 1.57 MP 3.28	MP 0.68 MP 0.86 MP 1.27	STATION OR MILE POST
		32232 20481 60710 23050 30357	23050 30357 62556 20481 20481 60270 60752	PAY ITEM NUMBER
		Place 20 CY Aggregate, 6" thick, GFM at Cripple Horse Pit Drainage Excavation, Type Dip Existing 18" CMP, Jack Crushed Inlet End Project, Junction 4916 Left End Roadside Brushing End Road Reconditioning	Begin Roadside Brushing Begin Road Reconditioning, Compaction Method A Seed and Fertilize all Disturbed Areas, Dry Method Drainage Excavation, Type Dip Drainage Excavation, Type Dip Existing 18" CMP, Add 3 LF 18" CMP with Band Clean Outlet	Dunn Creek Wolf Creek NFSR 525 DESCRIPTION OF WORK JUNCTION WITH NESR 334

SHEET NO. 8 OF 23

SHEET TITLE ROAD LOG

RD. 334 & 525

DESIGNED BY K. WICKWARD 9/2014 DRAWN BY NJM 4/22/14

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STATION OR MILE POST	PAY ITEM NUMBER 23050		 	STATION OR FINALE POST 0.00
	30357	Begin Road Reconditioning, Compaction Method A		-
MP 0.10	20480	Install 22 LF Surface Water Deflector	0.34	0.34 20481
MP 0.24	20480	Install 18 LF Surface Water Deflector	0.43	H
MP 0.31	20481	Drainage Excavation, Type Dip	0.53	+
NE 1.44	20350	End Project End Roadside Brushing	0.81	0.70 20400
	30357	End Road Reconditioning	1.07	Н
MP 1.49		End Road	1.14	1.14 20481 1.22 20480
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				20350
_				30357

SHEET NO. 9 OF 23 SHEET TITLE

ROAD LOG RD.4911 & 4913 DESIGNED BY K. WICKWARD 9/2014 DRAWN GY NJM 4/22/14

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U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

KOOTENAI NATIONAL FOREST FILE No.





	Hornet Ridge G NFSR 4913G			West Wyoma NFSR 4914
MILE POST NUMBER	_	STATION OR MILE POST	PAYITEM	DESCRIPTION OF WORK
+	Begin Project, Junction with NFSR 4613	0		Junction with NFSR 4916
23050	Begin Roadside Brushing		23050	Begin Roadside Brushing
30357	Begin Roadway Reconditioning		30357	Begin Roadway Reconditioning
0.13 20481	Remove Berm	0.01	25101	Remove slump material from road above, reestablish 14' wide outslope road
-	Install 40 LF, 18" CMP	0.02	20478	Begin Slump Removal, Blend into road with 4% outslope.
-	Remove Berm	0.03	20478	End Slump Removal, Blend into road with 4% outslope.
+	Install 32 LF, 24" CMP, See Sheet 17 of 23	0.06	20419	Existing Drain Dip, Construct 20 LF outlet ditch
-	Install 38 LF, 57" x 38" CMPA, See Sheet 17 of 23	0.09	20419	Construct Catch Basin, 1 CY Class 1 Riprap, Begin 60 LF Ditch Excavation
+		0.11	20419	End Ditch Construction, Begin Existing Ditch
0.30 60270	Install 30 LF, 18" CMP	0.12	60710	Existing 18" CMP Culvert, Jack crushed inlet
-	End Project	0.19	60752	Existing 18" CMP Culvert, Clean Inlet & Outlet
23050	End Roadside Brushing	0.27	20404	Place Unclassified Borrow, 16 CY , GFM @ cut slope above road
30357	End Roadway Reconditioning	0.34	20404	Place Unclassified Borrow, 4 CY, GFM @ cut slope above road
		0.36	60752	Existing 18" CMP Culvert, Clean Inlet & Outlet
			20404	Place Unclassified Borrow, 10 CY, GFM @ cut slope above road
		0.49		End Existing Road, Begin New Road Construction
			23050	End Roadside Brushing
			30357	End Roadeway Reconditioning
				Begin Road Construction
		0.66		End Road Construction

SHEET TITLE

ROAD LOG

RD. 4913G & 4914 SHEET TITLE

DESIGNED BY K. WICKWARD 9/2014 DRAWN BY NJM 4/22/14 CHECKED BY NJM 5/2014

KOOTENAI NATIONAL FOREST

GTR DUNN TIMBER SALE

U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE

KOOTENAI NATIONAL FOREST FILE No.





	Wyoma Crack NESR 4916 W		E 2	roma Crook A S
1	۱			Wyoma Creek A Spur NESK 4916A
MILE POST NUMBER	DESCRIPTION OF WORK	STATION OR MILE POST	PAYITEM	DESCRIPTION OF WORK
-	Begin Road, Junction with NFSR 525	0.00	- 1	Begin Project, Junction with NFSR 4916
23050	Begin Roadside Brushing		23050	Begin Roadside Brushing
30357	Begin Roadway Reconditioning		30357	Begin Roadway Reconditioning
30650	Begin Dust Abatement	0.21	- 1	Outslope Road
0.18 20480	Install 26 LF Surface Water Deflector	0.24		End of Project, Corner of Unit 42S, road continues
4	Install 26 LF Surface Water Deflector		23050	
+	Install 26 LF Surface Water Deflector			End Roadway Reconditioning
-	Install 22 LF Surface Water Deflector			
-	Install 24 LF Surface Water Deflector			
\dashv	Install 20 LF Surface Water Deflector			
-	Drainage Excavation, Type Outslope Road 4%			
-	Existing 18" CMP, Jack crushed Inlet			
	Existing 18" CMP, Jack crushed Inlet			
32222	Place 20 CY Pit Run, 2" Max, Compaction Method B			
1.70 20481	Construct Drain Dip			
2.05 20481	Construct Drain Dip			
2.20 20480	Install 24 LF Surface Water Deflector			
2,37 20480	Install 24 LF Surface Water Deflector			
2.44 60710	Existing 18" CMP, Jack crushed Inlet			
2,54 60752	Existing 18" CMP, Clean Outlet			
2.56 20481	Construct Drain Dip			
-	Install 24 LF Surface Water Deflector			
3.21 20480	Install 26 LF Surface Water Deflector			
-	Construct Drain Dip			
3,46 20480	Install 24 LF Surface Water Deflector			
3,53 20481	Construct Drain Dip			
3.60 20481	Construct Drain Dip			
3.69 30357	Begin Slump Repair, Incorporate in roadbed or sidecast			
3.87 30357	End Slump Repair			
	Construct Drain Dip			
4.04 20480	Install 26 LF Surface Water Deflector			
4.17 20480	Install 24 LF Surface Water Deflector			
	Construct Drain Dip			
	Existing 18" CMP, Clean Outlet			
4.58 20481	Construct Drain Dip			
4.80 20481	Construct Drain Dip			
	Construct Drain Dip			
5.35	End Project, Junction NFSR 4924 Right			
23050	End Roadside Brushing			
30357	End Roadway Reconditioning			
	First Abatement			

ROAD LOG RD. 4916 & 4916A

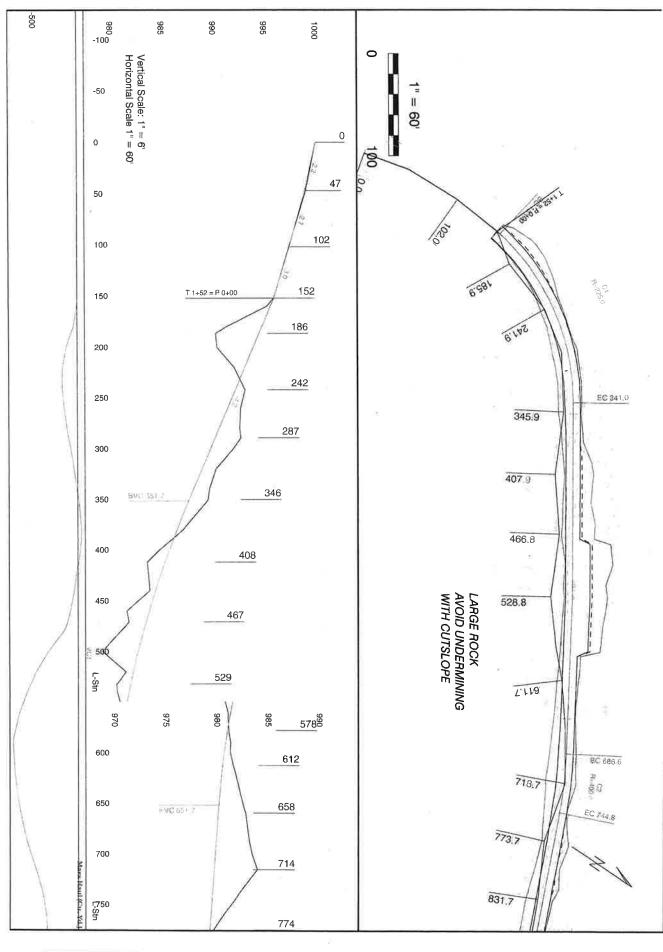
K. WICKWARD 9/2014 DRAWN BY NJM 4/22/14 CHECKED BY NJM 5/2014

KOOTENAI NATIONAL FOREST GTR DUNN TIMBER SALE

FOREST SERVICE







SHEET NO. 12 OF 23

SHEET TITLE

NFSR 4914 PLAN AND PROFILE DESIGNED BY: KMW 5/23/2014 DRAWN BY: KMW 5/23/2014

CHECKED BY: NJM 5/23/2014 KOOTENAI NATIONAL FOREST

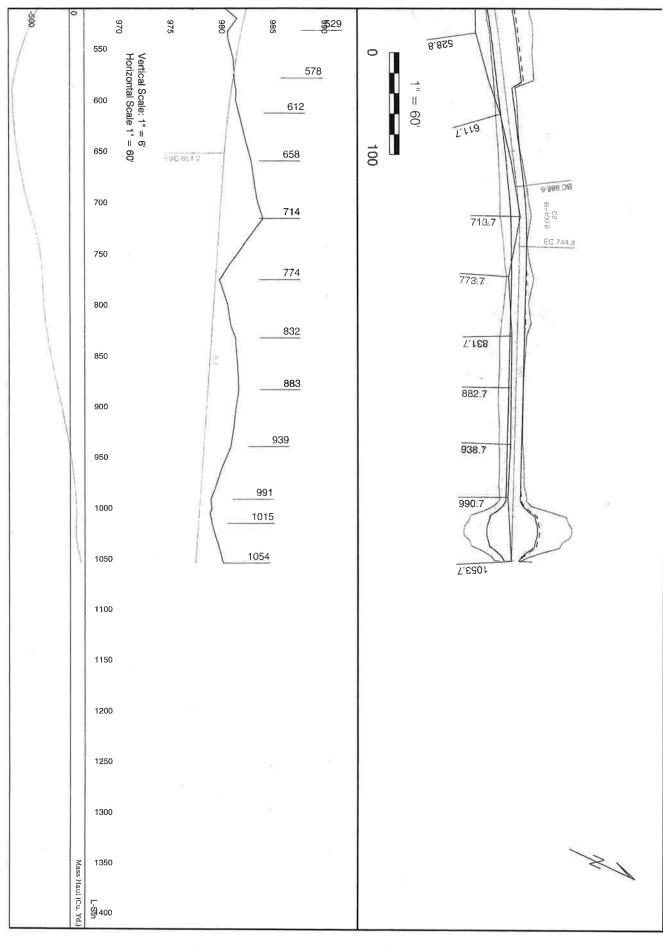
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Revision





SHEET NO. 13 OF 23

SHEET TITLE
NFSR 4914
PLAN AND

PROFILE

DESIGNED BY: KMW 5/23/2014 DRAWN BY: KMW 5/23/2014 CHECKED BY: NJM 5/23/2014

KOOTENAI NATIONAL FOREST

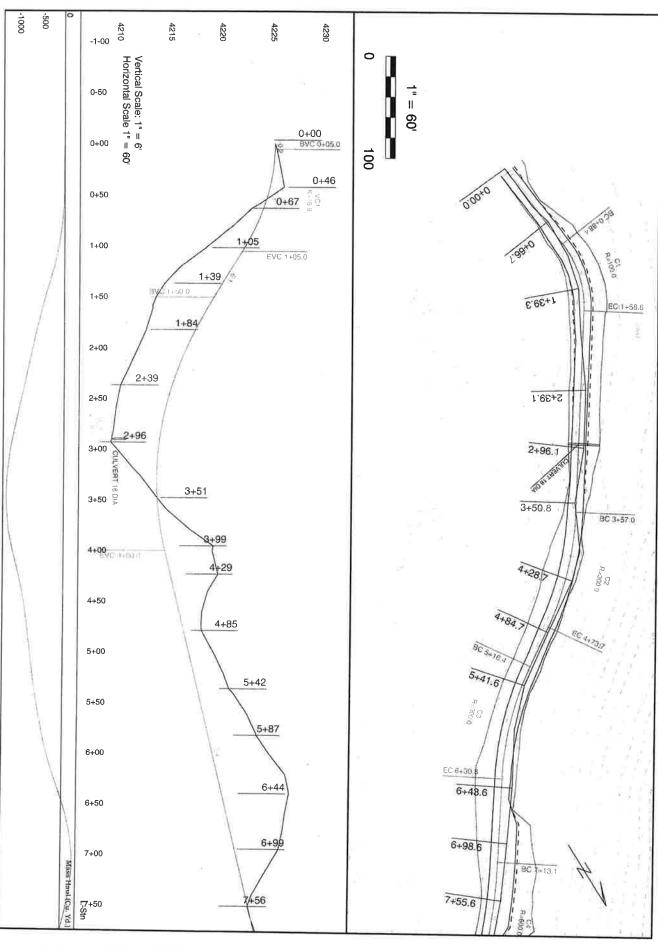
GTR DUNN TIMBER SALE

U.S. DEPARTMENT OF AGRICULTURE

FOREST SERVICE

Revision





14 OF 23 SHEET NO.

SHEET TITLE NFSR 4916B **PLAN AND PROFILE**

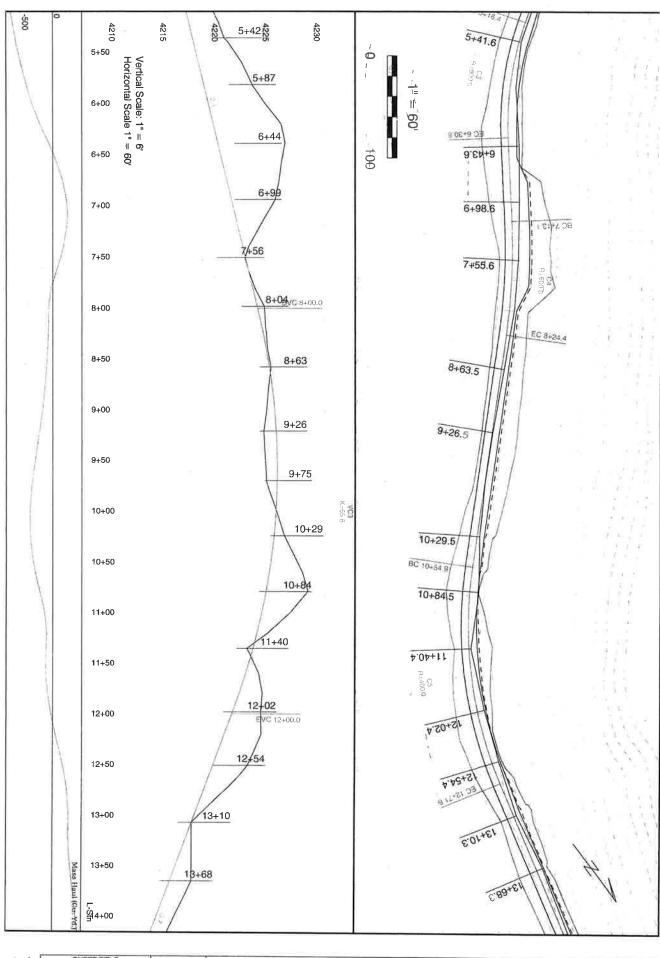
DESIGNED BY: KMW 5/23/2014 DRAWN BY: KMW 5/23/2014 CHECKED BY: NJM 5/23/2014

KOOTENAI NATIONAL FOREST

GTR DUNN TIMBER SALE

U.S. DEPARTMENT OF AGRICULTURE **FOREST SERVICE**

KOOTENEI NATIONAL FOREST FILE No.



SHEET NO. 15 OF 23

SHEET TITLE
NFSR 4916B
PLAN AND
PROFILE

DESIGNED BY: KMW 5/23/2014 DRAWN BY: KMW 5/23/2014

CHECKED BY: NJM 5/23/2014 KOOTENAI NATIONAL FOREST

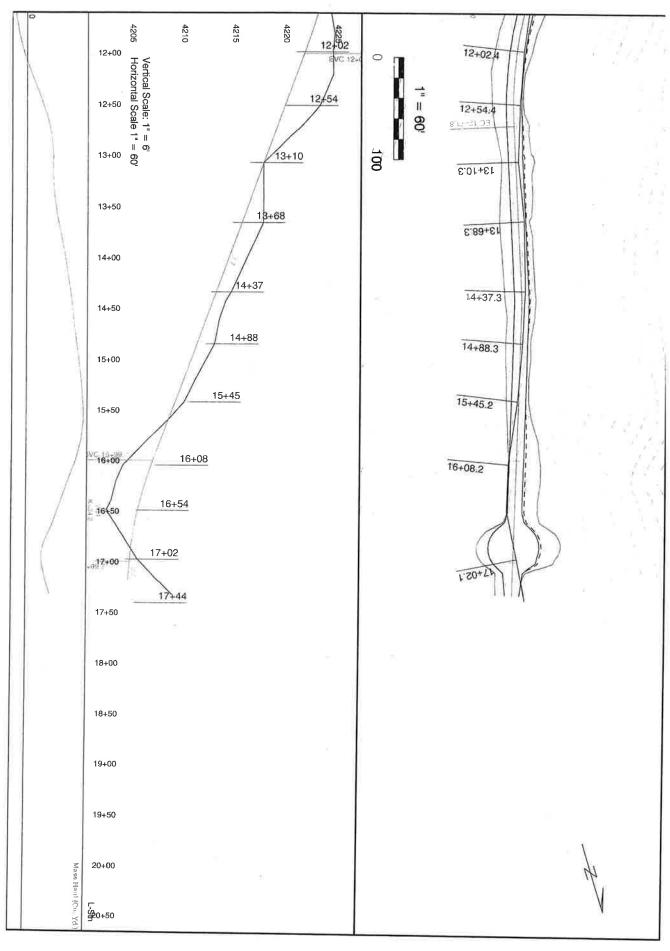
GTR DUNN TIMBER SALE

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

KOOTENEI NATIONAL FOREST

Revision





SHEET NO. 16 OF 23 SHEET TITLE
NFSR 4916B
PLAN AND
PROFILE

DESIGNED BY: KMW 5/23/2014 DRAWN BY: KMW 5/23/2014 CHECKED BY: NJM 5/23/2014

KOOTENAI NATIONAL FOREST

GTR DUNN TIMBER SALE

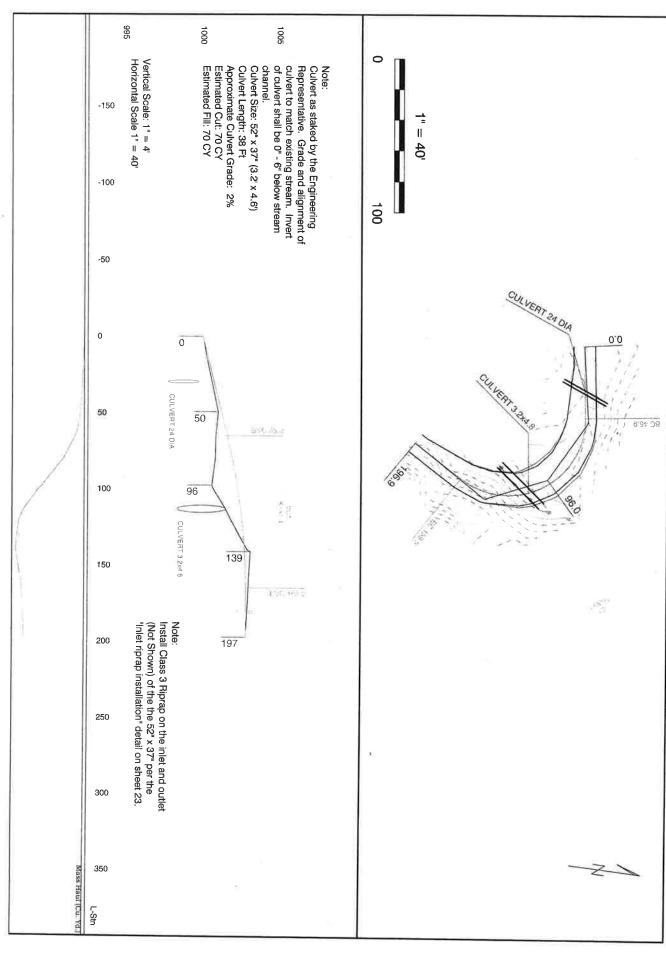
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KOOTENEI NATIONAL FOREST







SHEET NO.

SHEET TITLE **NFSR 4913G**

PLAN AND PROFILE

DESIGNED BY: KMW 5/23/2014 DRAWN BY: KMW 5/23/2014 CHECKED BY: NJM 5/23/2014

KOOTENAI NATIONAL FOREST

GTR DUNN TIMBER SALE

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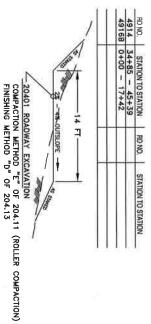
FILE No.

Revision



NEW CONSTRUCTION DETAILS

ROADWAY CROSS SECTION DETAIL TYPICAL



TURNOUT CONSTRUCTION DETAIL (LEFT OR RIGHT)

TURNOUT 110 FT MINIMUM

NOTES:

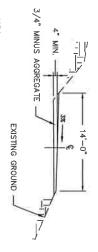
1. DESIGN CUTSLOPE RATIOS ARE BASED ON COMMON MATERIALS, IF OTHER MATERIALS ARE ENCOUNTERED, THE FOLLOWING SHALL APPLY:

CONSTRUCTION TOLERANCE "J" SHALL A
2.1. ROADBED WIDTH: +2 FEET
2.2. SUBGRADE ELEV.: +3 FEET
2.3. CENTERLINE ALIGNMENT: +3 FEET
2.4. CUT/FILL SLOPES: +3 FEET APPLY:

SLOPES >50%:
RIPPABLE ROCK:
SOLID ROCK: COMMON:

RECONSTRUCTION DETAILS

AGGREGATE PLACEMENT DETAIL FOR SPOT PLACEMENT



- NOTES:

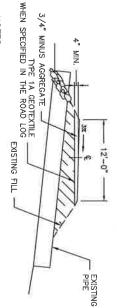
 1. 3/4" MINUS AGGREGATE WILL BE GOVERNMENT PROVIDED AND
 SHALL BE OBTAINED FROM THE CRIPPLE HORSE PIT, RD. 4925.

 THE AGGREGATE SHALL BE LAYED DOWN IN A LIFT WITH A
 COMPACTED THICKNESS OF 4".

 SEACH LIFT SHALL BE COMPACTED USING A STEEL-WHEELED,
 VIBRATORY ROLLER COMPACTOR.

 4. THE LENGTH OF PLACEMENT IS AS STAKED BY THE ENGINEERING
 REPRESENTATIVE.

<u>AGGREGATE PLACEMENT DETAIL</u> FOR COVER OVER CULVERTS



- 3/4" MINUS AGGREGATE WILL BE GOVERNMENT PROVIDED AND SHALL BE OBTAINED FROM THE CRIPPLE HORSE PIT, RD. 4925. THE AGGREGATE SHALL BE LAID DOWN IN A LIFT WITH A MINIMUM COMPACTED THICKNESS OF 4".
 EACH LIFT SHALL BE COMPACTED USING A STEEL-WHEELED, VIBRATORY ROLLER COMPACTOR.
 THE LENGTH OF PLACEMENT IS AS STAKED BY THE ENGINEERING REPRESENTATIVE.

DRAWINGS NOT TO SCALE

18 OF 23 SHEET NO.

SHEET TITLE CONSTRUCTION **DETAILS**

DESIGNED BY K. WICKWARD 9/2014 DRAWN BY NJM 4/22/14 CHECKED BY NJM 5/2014

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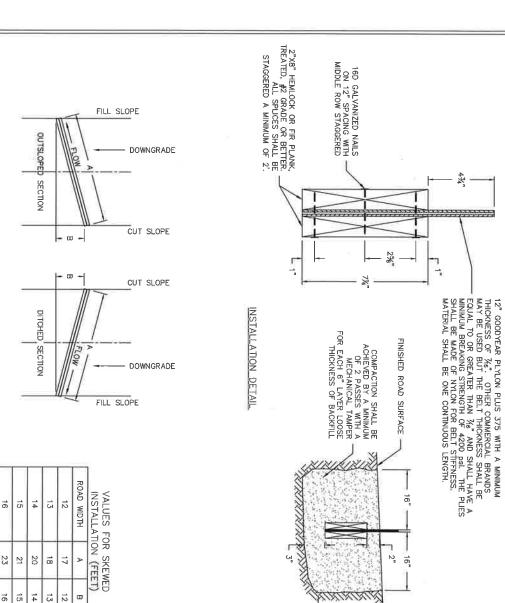
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JRFACE WATER DEFLECTOR DETAILS



NOTES

- ALL TREATED LUMBER SHALL BE INCISED AND PRESSURE TREATED IN ACCORDANCE WITH THE AWPA UC4-A FOR GROUND CONTACT.
- FIELD TREATMENT: ALL ABRASIONS AND CUTS MADE IN THE FIELD SHALL BE CAREFULLY TRIMMED AND GVEN THREE BRUSH COATS OF THE TREATMENT SOLUTION. HOLES DRILLED IN THE FIELD SHALL BE POURED FULL OF PRESERVATIVE AND PLUGGED WITH TIGHT FITTING TREATED PLUGS.
- ALL HARDWARE SHALL CONFORM TO FP-03 716.02 AND SHALL BE GALVANIZED. LUMBER SHALL CONFORM TO FP-03 716.03.
- OUTLET OF DEFLECTOR SHALL BE A MINIMUM OF 0.5° LOWER THAN THE INLET.
- CERTIFICATIONS: ONE COPY OF THE FOLLOWING COMPLIANCE CERTIFICATE SHALL BE FURNISHED UPON DELIVERY OF THE MATERIALS:

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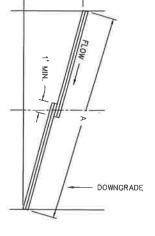
- SUPPLIER CERTIFICATION THAT ALL WOOD MATERIALS MEET THE REQUIREMENTS AS TO SPECIES AND GRADE.
- CERTIFICATION OF TREATMENT OF LUMBER TO INCLUDE TYPE OF PRESERVATIVE, RETIRTION IN PCF (ASSAY METHOD) AND PENETRATION IN INCHES, BY A QUALIFIED INSPECTION AND TESTING AGENCY.

'n

SUPPLIER CERTIFICATION THAT ALL RUBBER BELTING MATERIALS MEET THE REQUIREMENTS AS NOTED IN DETAIL.

<u>,</u>

SKEW SHALL BE 45% UNLESS OTHERWISE INDICATED, LENGTH AS INDICATED IN DRAINAGE LISTING.



DRAWINGS NOT TO SCALE

DOUBLE LANE

SINGLE LANE

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DRAINAGE LISTING

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	,	DOWNGRADE

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19 OF 23 SHEET NO.

SHEET TITLE SWD DETAILS DESIGNED BY K. WICKWARD 9/201-DRAWN BY NJM 4/22/14 CHECKED BY

KOOTENAI NATIONAL FOREST GTR DUNN TIMBER SALE

U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE

KOOTENAI NATIONAL FOREST FILE No





TOP OF DRAIN DIP 6" ± 1" HIGHER THAN BOTTOM OF DIP TYPICAL FILL SLOPE -DIP REINFORCING 4" MINUS PIT RUN SECTION A - A RIPRAP SECTION DETAIL WHEN SPECIFIED ON ROAD LOG RIPRAP 12" MIN. ص م AGGREGATE WHEN SPECIFIED ON ROAD LOG 0 DIP REINFORCEMENT WHEN SPECIFIED ON ROAD LOG DRAIN DIP DETAILS EMBANKMENT TRANSITION ZONE: OUTSLOPE TO EXISTING TEMPLATE NOTES: 3. AGGREGATE, DIP REINFORCEMENT, OR RIPRAP WILL ONLY BE REQUIRED WHEN SPECIFIED IN THE DRAINAGE LISTING OR RECONSTRUCTION LOG. 1. EXCAVATION BELOW THE EXISTING GRADE LINE WILL BE USED AS EMBANKMENT ON THE DOWN GRADE SIDE OF THE DIP. COMPACTION METHOD D. ALL DISTURBANCES SHALL BE KEPT WITHIN THE LIMITS OF THE DRAIN DIP. 60' MIN. DOWN GRADE 4" MINUS PIT RUN DIP REINFORCEMENT WHEN SPECIFIED ON ROAD LOG O NOT INTERCEPT DITCH 90° TO 120 PROFILE VIEW OUTSLOPE TEMPLATE PLAN VIEW TOP OF DRAIN DIN 50' MIN. TRANSITION ZONE: EXISTING TEMPLATE TO OUTSLOPE DRAWINGS NOT TO SCALE BOTTOM OF DRAIN DIP 30' VERTICAL CURVE €ROAD-60' MIN. EXISTING GRADE SHEET TITLE 20 OF 23 DESIGNED BY K. WICKWARD 9/2014 SHEET NO.

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GTR DUNN TIMBER SALE

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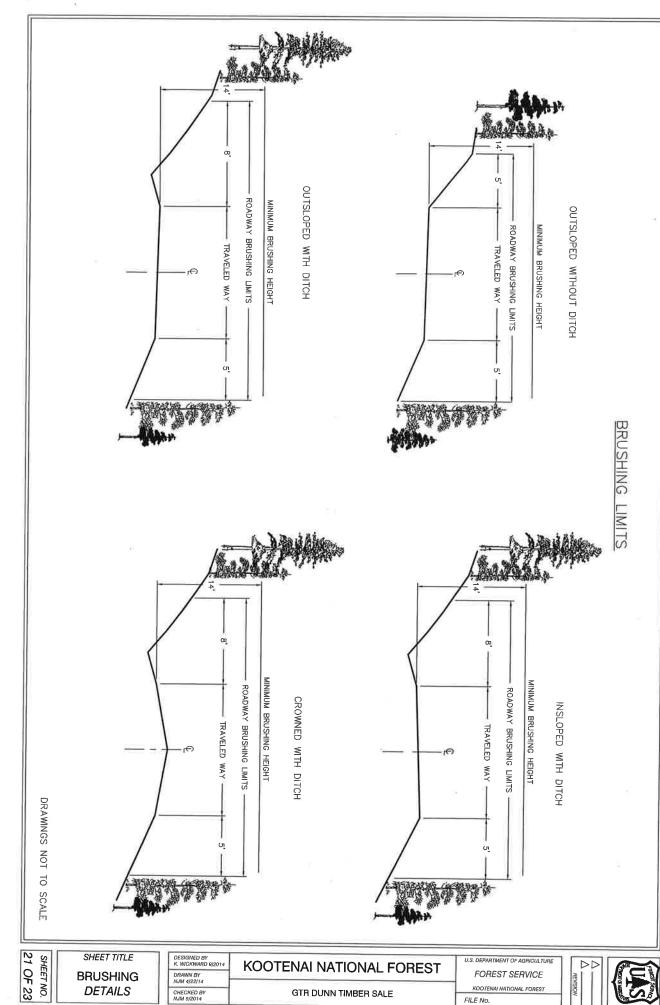
FILE No.

DRAIN DIP

DETAILS

DRAWN BY NJM 4/22/14

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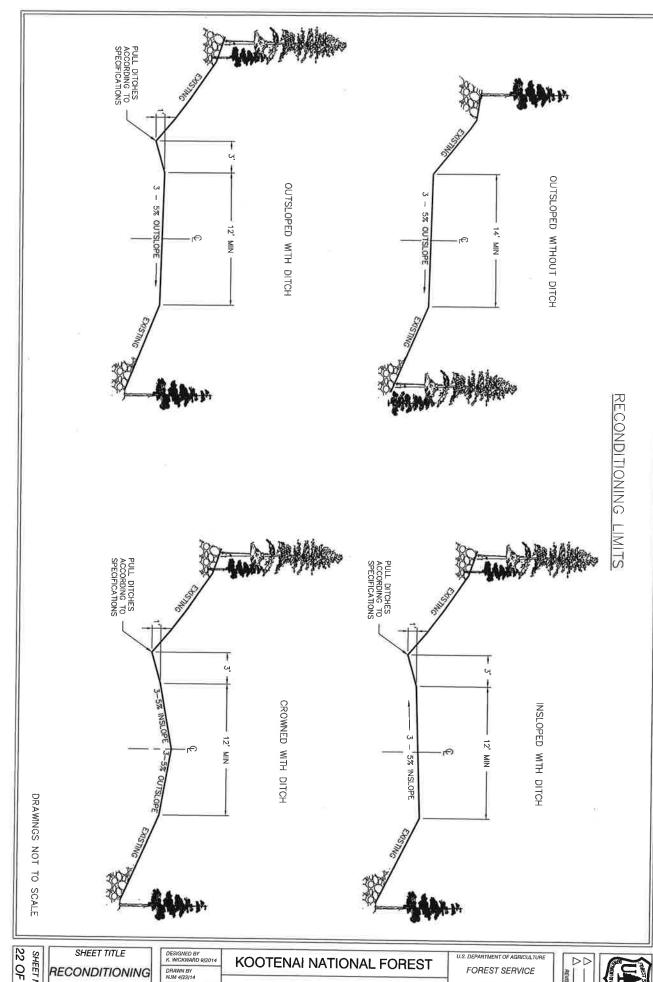


DETAILS

CHECKED BY NJM 5/2014

GTR DUNN TIMBER SALE





SHEET NO. 22 OF 23

DETAILS

DRAWN BY NJM 4/22/14 CHECKED BY NJM 5/2014

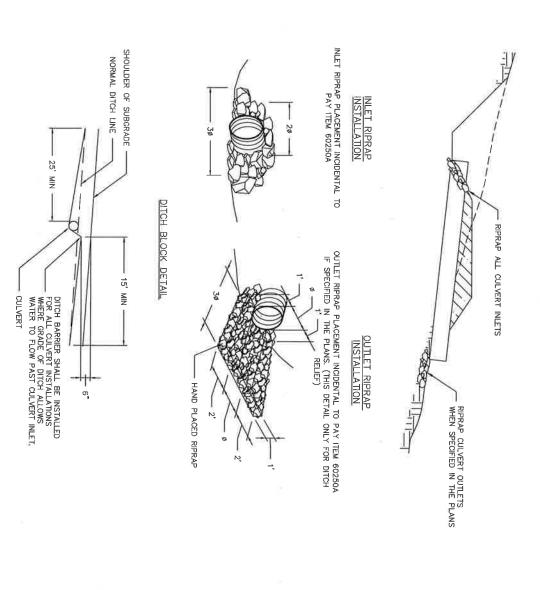
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TYPE II CULVERT INSTALLATION WITH REINFORCEMENT



23 OF 23 SHEET NO.

DRAWINGS NOT TO SCALE

SHEET TITLE CULVERT TYPE II INSTALLATION DESIGNED BY K. WICKWARD 9/2014 DRAWN BY NJM 4/22/14 CHECKED BY NJM 5/2014

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